From: Moravec, Miguel [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B3F25B0E69424734BC957708EF9533F4-MORAVEC, MI]

Sent: 8/7/2019 2:36:49 PM

To: Gessner, Lauren [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=0e7b04b30d744fa79c41c960b61c2e19-Gessner, La]; Cascio, Wayne

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a1bd931ca2f84ea8ac2f4c44538f3589-Cascio, Wayne]; Firestone, Michael

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=32a70f97969d462da98320e25d27fe23-Mfiresto]; Knudsen, Thomas

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c455f47a79054857908108d7a6dcda5b-Knudsen, Thomas]; Louie, Nica

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6edf2e5abafe43c688b3f6f6cd0536ef-Louie, Nica]; Sacks, Jason

[/o=ExchangeLabs/ou=Exchange Administrative Group

 $(FYDIBOHF23SPDLT)/cn=Recipients/cn=2099 bec11ced4d5c88c07a89aa8ee652-Sacks,\ Jason];\ Rogers,\ John\ M.$

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=9d2a5d5b6a71487cb4373cfcea7bb01b-Rogers, John M.]; Klieforth, Barbara

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=fd3c257f83384b14859e21e5a700d798-Klieforth, Barbara]; Raffaele,

Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cc48281bbab34bf5bf3ab1a63780d5ca-Kathleen Raffaele]; Axelrad, Daniel

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6a51eaa06cef403abd7d28275fd278b4-DAxelrad]; Ohanian, Edward

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=f119491e2ba8476381a39c57a456ac55-EOhanian]; Ramasamy, Santhini

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=f078b65256de4c22a8ec9d9f9720715f-SRAMASAM]; Ward, Prentiss

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ea5e0d404cd24652b7b401c86980ead0-Pward]; Whitlock, Siobhan

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=04f062f3f81c4352afdaa2622c912bb9-Tarver, Sio]; Keteles, Kristen

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=44affc6da534432a8a7787c6344185ee-Keteles, Kristen]; Menghrajani,

Jacquelyn [/o=ExchangeLabs/ou=Exchange Administrative Group]

(FYDIBOHF23SPDLT)/cn=Recipients/cn=fe15a33505784356b3a8c34ade3c8c51-JHAYES02]; Aguilar, Marcus

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7b710032dc3d423e91170ee9a4032d3d-Aguilar, Ma]; Stewart, Gretchen

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a321f0adb2d745d583d38e1a2e36b697-Stewart, Gretchen A.]; Bartels,

Kimberly [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=5aa1ae6ec9ee4c8dae63a1cde0867d5d-Larson, Kimberly]; Dye, Janice

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ecebf6b063f547878ad97b2a616ccbb4-Dye, Janice]; Miller, Colette

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=53199adc4ae647d8b92c67ae5d8b2bcf-Miller, Col]; Suero, Maryann

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=1f0d67522a5a42d5acd1ac3e14c70cf2-MSuero]; Bahadori, Tina

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7da7967dcafb4c5bbc39c666fee31ec3-Bahadori, Tina]; Hubal, Elaine

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d871bc8ab3c94a7c9a4716a951aa70ec-Cohen-Hubal, Elaine]; Geller, Andrew

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=51de0a18e67b4886a0020fe9c2e93f48-Geller, Andrew]; Guiseppi-Elie,

Annette [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=63d3e2eaeb9c4acba2609baa90b0f735-Guiseppi-El]; Gwinn, Maureen

[/o=ExchangeLabs/ou=Exchange Administrative Group

```
(FYDIBOHF23SPDLT)/cn=Recipients/cn=4bdc5237a5c440a7b664518e23eb5647-Gwinn, Maureen]; Hahn, Intaek
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=ff7b8b77f982422a98d8793a88be337a-Hahn, Intaek]; Hines, Ronald
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=464f333922cc4aa68db2a1677122ab58-Hines, Ronald]; Gibbons, Dayna
[/o=ExchangeLabs/ou=Exchange Administrative Group]
(FYDIBOHF23SPDLT)/cn=Recipients/cn=7de1aa41c89448e6b26325a1e19f9ae9-Gibbons, Dayna]; Foster, Stiven
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=43d242767f304355ad415ec856988213-sfoste02]; Hines, Erin
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=3e840f3081d94c45923db315e11110aa-Hines, Erin]; Gavett, Stephen
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=d5a02a1b92724d43b62314e403ab4ee7-Gavett, Stephen]; Fry, Meridith
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=6be7d51fa0ee416ea043fdc67c18f719-Fry, Meridi]; Kodavanti, Urmila
[/o=ExchangeLabs/ou=Exchange Administrative Group]
(FYDIBOHF23SPDLT)/cn=Recipients/cn=813ac332b11444719322c8370cc89694-Kodavanti, Urmila]; Tulve, Nicolle
[/o=ExchangeLabs/ou=Exchange Administrative Group]
(FYDIBOHF23SPDLT)/cn=Recipients/cn=5df597178ff54b8cb9c3edf239905634-Tulve, Nicolle]; Kenyon, Elaina
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=0395d5b93f214c8ca49066f498f7d5c9-Kenyon, Elaina]; Cashdollar, Jennifer
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=341010ea20014f059a33c49f880a7c36-Cashdollar, Jennifer]; Franzosa, Jill
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=a2cc12ea79e141048cc0c2302f9a539a-Franzosa, Jill]; Cowden, John
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=4cccc2629cb043e0901c6b5f61344e9c-Cowden, John]; Frithsen, Jeff
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=e3743bd6f3c345baaae407c1d6f78e92-FRITHSEN, JEFF]; Mazur, Sarah
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=17239e84cf754302834dce90abaf21d4-Mazur, Sarah]; Belle, Kara
[/o=ExchangeLabs/ou=Exchange Administrative Group]
(FYDIBOHF23SPDLT)/cn=Recipients/cn=8db65b54e54847ddb75d5aa71387aebe-Belle, Kara]; Euling, Susan
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=cb0873315ed244fa852df546e1191e4c-Euling, Susan]; Hackel, Angela
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=b2e0a52dbebc4d8c84961f50c117334d-Hackel, Angela]; Figueroa, Zaida
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=e9aff316c03a4396a97dc8555099a3d2-Figueroa, Zaida]; Dzubow, Rebecca
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=403ca1721f3d43d38de9189a93a95b76-Dzubow, Rebecca]; Schroeder,
Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=0db676b2fade4b54bebcc7b6e664fc94-Schroeder,]; Yaquian-Luna, Jose
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=b4ac9ea811cc4192b312280670944f3f-Yaquian-Lun]; Carleton, Jim
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=cde4afd5c7e6410a80809e722c4f03aa-Carleton, Jim]; Miller, Gregory
[/o=ExchangeLabs/ou=Exchange Administrative Group]
(FYDIBOHF23SPDLT)/cn=Recipients/cn=0e889cdc40224a5484182092e4824fa7-GMille03]; Nachman, Rebecca
[/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=Nachman, Rebecca];
Coopwood, Theodore [/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=2b197ea0ed734df49ccf4d1aeae0662e-Tcoopwoo]; Berger, Martha
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=58f5ef445e4d4dc694a2d4fb35951b9a-Mberger]; Albano, Emily
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=2b37ad261b8543579819fda30470f153-BARKER, EMILY]; Blair, Susanna
[/o=ExchangeLabs/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=6c869b985f3d43db982c18aaabd826bd-Blair, Susa]; Fiedorczyk, Bryan
```

[/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=145a0d880f35482e841c4d05443ca6d6-Fiedorczyk, Bryan]; Nagle, Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=72ce665eff784373a90fe2de78c78080-Nagle, Kathleen]; Schappelle, Seema [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=81c19296c1164a8dab7c8a7cb7b99d3c-Schappelle, Seema]; Selzer, Paula [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=33615dc9cf3b425499d4fc0ef6a7c151-Selzer, Paula]; Morgan, Marsha [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=dd3afb12720d42e0874d371eb51775ad-Morgan, Marsha]; Tietge, Joe [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b80e15eaaf374819a28f936069a093c2-Tietge, Joe]; Loughran, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=4d2a5935a18c4150bf6d8889c181ee4c-Loughran, Michael]; Nolt-Helms, Cynthia [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b374bff76a7f4ce5b4bdf96f92ddf4d7-Nolt, Cynthia]; Malashock, Daniel [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=86ad680ab41a4fa6a0fc113c1222fcb0-Malashock,]; Bever, Ronnie [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6c971f60b28c46d8b68fafc244d9a464-Bever, Ronnie]; OShaughnessy, Katie [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=021d1026cc6047f3bbd8e158148f9311-Oshaughness]; Kirk, Andrea [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=950a380c45ab4cb48d882dc3c2a87f30-Kirk, Andre]; Markey, Kristan [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a075536a33b247d393b1643f84ea5dfa-Markey, Kristan]; Bell, Kiersten [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=dca1641ef9bd491f87a3cbeef5e18e4b-Bell, Kiers]; Briskin, Jeanne [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d4f44944371d40819f2da6a900426f1a-Briskin, Jeanne]

CC: Zambrana, Jose [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=88e570833823499c9bd33b7e782845ac-Zambrana, Jose]; Thomas, Kent [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ea426e5fb53d4419904e6a0627ec7384-Thomas, Kent]; Chan, Sydney [/o=ExchangeLabs/ou=Exchange Administrative Group

 $\label{lem:constraint} \begin{tabular}{ll} (FYDIBOHF23SPDLT)/cn=Recipients/cn=35968412c9e04bffae1642ea371e5a85-Chan, Sydne]; Frederick, Tim [/o=ExchangeLabs/ou=Exchange Administrative Group \end{tabular}$

 $\label{lem:control} \begin{tabular}{l} (FYDIBOHF23SPDLT)/cn=Recipients/cn=b9cfa5338eb14c7a9fb96d4659d519c4-Frederick, Timothy]; Riutta, Callifornia (Color of Color of Color$

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8cb120d2853a4bb9b9457554172c1ed6-Riutta, Cal]; Dai, Mona [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=04b65457e78f48adb6250e4ed9ab06c7-Dai, Mona]; Reaves, Elissa [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=031646294ce14535ae428ab2f8d388c4-Reaves, Elissa]; Vogel, Dana [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8fa57c9380b2438895809b525dd668ea-Dana Vogel]; Lowit, Anna [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=1d3428a2c0b84d5099124a0460babd53-Anna B. Lowit]

Subject: CEH PACT Meeting

Attachments: Tire Crumb Study CEH PACT Update 20190807.pptx; CEH PACT_Southside Chatt Aug 2019 v2.pptx

Attaching slides for today's 11:00am meeting:

Miguel Moravec Chemical Safety for Sustainability Research Program ORAU, U.S. EPA Moravec.Miguel@epa.gov

----Original Appointment----

From: Gessner, Lauren <gessner.lauren@epa.gov>

Sent: Thursday, August 1, 2019 10:47 AM

To: Cascio, Wayne; Firestone, Michael; Knudsen, Thomas; Louie, Nica; Sacks, Jason; Rogers, John M.; Klieforth, Barbara; Raffaele, Kathleen; Axelrad, Daniel; Ohanian, Edward; Ramasamy, Santhini; Ward, Prentiss; Whitlock, Siobhan; Keteles, Kristen; Menghrajani, Jacquelyn; Aguilar, Marcus; Stewart, Gretchen; Bartels, Kimberly; Dye, Janice; Miller, Colette; Suero, Maryann; Bahadori, Tina; Hubal, Elaine; Geller, Andrew; Guiseppi-Elie, Annette; Gwinn, Maureen; Hahn, Intaek; Hines, Ronald; Gibbons, Dayna; Foster, Stiven; Hines, Erin; Gavett, Stephen; Fry, Meridith; Kodavanti, Urmila; Tulve, Nicolle; Kenyon, Elaina; Cashdollar, Jennifer; Franzosa, Jill; Cowden, John; Frithsen, Jeff; Mazur, Sarah; Belle, Kara; Euling, Susan; Hackel, Angela; Figueroa, Zaida; Dzubow, Rebecca; Schroeder, Kathleen; Yaquian-Luna, Jose; Carleton, Jim; Miller, Gregory; Nachman, Rebecca; Coopwood, Theodore; Berger, Martha; Albano, Emily; Blair, Susanna; Fiedorczyk, Bryan; Nagle, Kathleen; Schappelle, Seema; Selzer, Paula; Morgan, Marsha; Tietge, Joe; Loughran, Michael; Nolt-Helms, Cynthia; Malashock, Daniel; Bever, Ronnie; OShaughnessy, Katie; Kirk, Andrea; Markey, Kristan; Bell, Kiersten; Moravec, Miguel; Briskin, Jeanne; Foos, Brenda; Kargbo, Marcia

Cc: Zambrana, Jose; Thomas, Kent; Chan, Sydney; Frederick, Tim; Riutta, Cal; Dai, Mona; Reaves, Elissa; Vogel, Dana; Lowit, Anna; Rosenberg, Lorna

Subject: CEH PACT Meeting

When: Wednesday, August 7, 2019 11:00 AM-12:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: RTP - Room D101; Skype Meeting; Dial in number: + Ex. 6 Personal Privacy (PP)

Hello everyone,

The Agency is transitioning from Adobe Connect to Skype. Please click on the "Join Skype Meeting" link to view slides for this and future CEH PACT meetings:

→ Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by Phone

Toll number: + Ex. 6 Personal Privacy (PP)

Find a local number

Conference ID Ex. 8 Personal Privacy (PP) (same as access code above)

Help

1. Roll Call – 5 min

2. ORD Science Update – 15-20 mins

Jose Zambrana (NERL) - US Federal Research Action Plan (FRAP) on Recycled Tire Crumb Rubber Used on Synthetic Turf Playing Fields and Playgrounds - Update on the Final Report Part 1: Tire Crumb Characterization

• What is the children's environmental health issue that our research is addressing?

Concerns have been raised by the public about the potential health risks from playing on synthetic turf fields in the U.S. containing tire crumb rubber. To help address these concerns, the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR) and the U.S. Environmental Protection Agency (EPA), in collaboration with the Consumer Product Safety Commission (CPSC), launched a multi-agency research effort in February 2016. This multi-agency research effort, known as the Federal Research Action Plan on Recycled Tire Crumb Used on Playing Fields and Playgrounds (FRAP), is focused on assessing potential human exposure, which includes conducting research activities to characterize the chemicals associated with tire crumb rubber and to identify the ways in which people may be exposed to those chemicals based on their activities on synthetic turf fields.

What did we learn?

In general, and as expected, our findings support the premise that while chemicals are present in the tire crumb rubber as expected, human exposure may be limited based on what is released into air or simulated biological fluids. Where comparative data are available from this study and previous studies, concentrations of most metal and organic chemicals found in tire crumb rubber were similar. Further, emissions of many organic chemicals into air were found to be below detection limits or test chamber background and releases of metals into simulated biological fluids were very low when compared to the typical assumption of 100% bioaccessibility. All tire crumb rubber samples tested positive for bacteria. This is not surprising, as bacteria are present in soil and on surfaces in our environment.

When will we know more?

EPA and CDC/ATSDR are reporting research findings in two parts. Part 1 communicates the research objectives, methods, results and findings for the tire crumb rubber characterization research (i.e., what is in the material). Part 2, to be released later, will include data to characterize potential human exposures to the chemicals found in the tire crumb rubber material while using synthetic turf fields. Part 2 will be released along with results from a biomonitoring study being conducted by CDC/ATSDR to investigate potential exposure to constituents in tire crumb rubber. These research activities and the resulting findings do not provide an assessment of the risks associated with playing on or contact with the tire crumb rubber used for synthetic turf fields. Instead, these research results should inform future risk assessments. CPSC is conducting separate research on playgrounds.

Provide citations to papers.

U.S. EPA & CDC/ATSDR. (2019). Synthetic Turf Field Recycled Tire Crumb Rubber Research Under the Federal Research Action Plan Final Report: Part 1 - Tire Crumb Characterization (Volumes 1 and 2). (EPA/600/R-19/051). U.S. Environmental Protection Agency, Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry.

3. Regional Science Update – 15-20 mins

Sydney Chan (Region 4) - Southside Chattanooga Lead Site

• What is the children's environmental health issue that our research is addressing?

The children's environmental health issue being addressed is elevated blood-lead levels due to lead-contaminated soils.

What did we learn?

Historically, over 60 foundries operated in and around Chattanooga, TN. Foundry waste was then used as fill material in residential properties. Some of the foundry waste contained elevated concentrations of lead. We learned of a relatively higher rate of elevated blood-lead levels of children within certain neighborhoods that contained foundry waste material.

• When will we know more?

We are actively investigating and remediating residential properties with elevated levels of lead-contaminated soils. We are working closely with count and state public health agencies to educate local communities and to monitor local blood-lead levels in children.

Provide citations to papers.

CDC Lead Homepage

https://www.cdc.gov/nceh/lead/default.htm

Blood Lead Levels in Children Fact Sheet

https://www.cdc.gov/nceh/lead/acclpp/lead_levels_in_children_fact_sheet.pdf

Site Information

https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0410686

XRF Field Operations Guide

https://www.epa.gov/risk/regional-4-superfund-x-ray-fluorescence-field-operations-guide

4. Administrative Updates - 5 min

- Please feel free to forward this invite to those interested within the Agency.
- Read/subscribe to our monthly update, <u>The Chalkboard</u>, which includes new ORD CEH-related research, upcoming CEH PACT Presentations, and CEH-related conferences and events.
- Check out our Intranet site for more CEH related information, including past presentations.

2019					
January	Cancelled				
February	NHEERL – Tim Shafer (New Alternative Methods for Developmental Neurotoxicity Testing: Moving from	Region 7 — Emily Albano (Region 7's St. Joseph, Missouri Lead Initiative)			

	development to evaluation of assays)		
March	NHEERL – Katie O'Shaughnessy (Bridging the Gaps: New Tools and Approaches for Evaluating the Neurodevelopmental Effects of Thyroid Toxicants)		OLEM - Andrea Kirk (Thyroid Systematic Review: An Opportunity to Improve Risk Assessments for the Protection of Children's Health)
April	NHEERL – Colette Miller (Acute exposures, lifelong consequences? Assessing metabolic effects of early- life ozone exposure)		OP – Daniel Axelrad/Chris Dockins (<i>Advancing benefits analysis of</i> <i>children's health effects</i>)
May	NERL — Jose Zambrana (Brief Tire Crumb Status Update)	Region 10 — Bryan Fiedorczyk (<i>R10</i> Air Quality Flag Program)	OW – Yvonne Gonzalez and Victoria Ellenbogen (<i>EPA Tools to Reduce Lead</i> in Drinking Water in Schools and Child Care Facilities)
June	NCEA – Dustin Kapraun (PBPK Models for Human Pregnancy and Gestation)		OCHP-ORD Collaboration – Mona Dai (Characterizing Aggregate Exposure to Environmental Chemicals by Lifestage During Childhood)
July	NHEERL – Achal Patel and Danelle Lobdell (Assessing Association between Environmental Quality (EQI) and Infant Mortality in the United States)	R8 – Kim Bartels (<i>Region 8 Children's</i> Health Update)	
August	NERL – Jose Zambrana (US Federal Research Action Plan (FRAP) on Recycled Tire Crumb Rubber Used on Synthetic Turf Playing Fields and Playgrounds - Update on the Final Report Part 1: Tire Crumb Characterization)	R4 – Sydney Chan (<i>Southside</i> Chattanooga Lead Site)	